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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/660,948 | 09/13/2000 | Thomas K. Fehring | 8881-1A | 7387 16 |
| 826 | 7590 | 11/19/2003 | EXAMINER | |
| ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000 | | | WYSZOMIERSKI, GEORGE P | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1742 | |

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/660,948

Applicant(s)

FEHRING ET AL.

Examiner

George P Wyszomierski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-22 and 35-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-20, 35 and 37 is/are rejected.
- 7) ☒ Claim(s) 21, 22 and 36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. The Office Action mailed June 13, 2003 is hereby withdrawn. A new Office Action follows.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17 and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over any of Rademacher (U.S. Patent 3,865,585), Mann (U.S. Patent 4,491,561), or Kulmburg (U.S. Patent 5,039,574).

Each of the above prior art references disclose cobalt-based alloys containing chromium and molybdenum, and which are biocompatible (e.g. used for dental prostheses or surgical implants). Thus, the prior art materials appear to be physically identical (in the sense of 35 USC 102) to the claimed materials.

The prior art does not specifically state that the prior art alloys are essentially free of carbide, nitride, sigma, or other second phase particles. However, the absence of any disclosure of such phases in the prior art is taken by the examiner to be an indication either:

a) That they are not present (in which case the claimed materials would be completely identical to those of the prior art under 35 USC 102), or

b) That they are present in some insignificant amount which does not affect the basic properties of the alloys (in which case the claimed materials would be at best obvious variants of what is disclosed in the prior art).

Consequently, the claimed invention is held to be either fully disclosed by, or at the very least an obvious variant of, the materials as disclosed by Rademacher, Mann, or Kulmburg.

4. Claim 35 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rademacher or Mann.

Claim 37 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mann or Kulmburg.

The prior art discloses specific examples of alloy compositions which fully meet the limitations of the instant claims. With regard to claim 35, see Rademacher Table 1, examples 1 and 3, or Mann Table 2, component CC2. With regard to claim 37, see Rademacher Table 1, example 8, or Mann Table 2, component CC1 or CC2. These examples of the prior art are held to be identical to, or at the very least obvious variants of, the claimed invention for the same reasons as set forth in item no. 3 supra.

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of Rademacher, Mann, or Kulmburg.

The prior art does not specify that the prior art materials are forged. However, the prior art does indicate that the prior art materials are easily worked; see, for example Rademacher column 1, line 30, Mann column 2, line 45, or the relatively high elongation values disclosed by

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Kulmburg. Based upon these disclosures, it would have been considered an obvious expedient by one of ordinary skill in the art to forge the prior art materials into a desired shape, e.g. the shape of a prosthesis.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kulmburg.

Kulmburg indicates that the prior art materials may have a hardness as high as HV 410, equivalent to HRc 41. While no specific example of a forged product of this hardness is disclosed by Kulmburg, it would have been considered an obvious expedient by one of ordinary skill in the art to employ specific compositions within the guidelines of Kulmburg (e.g. Kulmburg column 2, lines 1-10) to achieve a desired hardness value.

7. Claims 21, 22 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose or suggest a cobalt-base material comprising chromium and molybdenum and having the yield strength of claim 21, or the specific compositional limits of claim 36.

8. The examiner agrees that the Declaration filed May 8, 2003 is sufficient to remove the previously applied Stinson patent as a reference (The examiner notes that the Stinson patent should have properly be applied under 35 USC 102(e) as opposed to 102(b), i.e. the Stinson patent was published subsequent to the effective filing date of the present application). The examiner further agrees that one of ordinary skill in the art would be able to determine the

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meaning of all of the terms used in the instant claims, and thus the previous rejection of the claims under 35 USC 112 is withdrawn.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (703) 308-2531. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. Effective October 1, 2003, all patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

GPW
November 17, 2003

GEORGE WYSZOMIERSKI
PRIMARY EXAMINER